

Common Seattle Trees

that may qualify for new protection measures

For implementation of Seattle Municipal Code (SMC) Tree Protection Chapter 25.11 and Director's Rule 6-2001

Note: The Threshold Diameter indicated in this brochure refers to the size of tree, by specific species, that may be designated as an "Exceptional Tree" according to SMC 25.11 and Director's Rule 6-2001.

Thanks to the City of Bellevue's Parks and Community Services Department for the use of their publication *Trees of Bellevue*.

MAPLE FAMILY

Acer species

General

Three ornamental maples found in Seattle are shown at right. Two native species are described more in-depth in the next two pages. The following applies to all maples.

Form

Deciduous trees or shrubs

Leaves

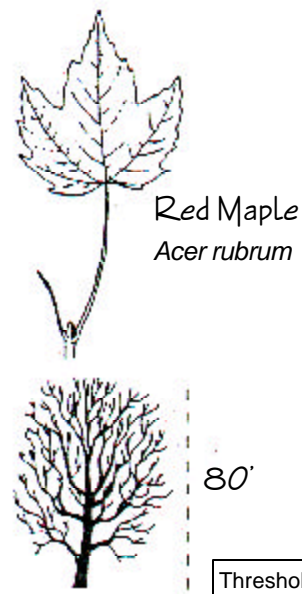
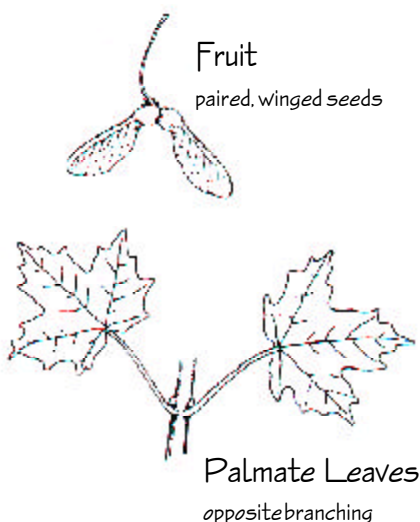
Deciduous - Opposite - Simple
Palmate leaves always opposite on the branch; lobed to various degrees

Fruit

Small and non-showy, usually in clusters: dark red (Japanese and Red) or yellow-green (Norway)

Flower

Always paired, winged seeds; called 'helicopters' by children for the way each half of the pair spins to the ground when dropped



BIGLEAF MAPLE

Acer macrophyllum

Threshold: 4' 6"

Form

30-100 feet; can have several main trunks; massive, spreading crown

Leaves

Deciduous - Alternate - Simple
Palmate; 3-5 deep lobes; enormous; 8-14" in length and width

Bark

Green when young; dark gray-brown, deeply furrowed, with mosses and ferns growing abundantly when older

Flower

Greenish-yellow and tiny (1/4"); hanging in elongated clusters

Fruit

Pairs of winged seeds; coarsely hairy at acute angled juncture

Tree Tip

Produces 'canopy roots' which harvest nutrients from the moss and debris which collect in the branches. Native.



VINE MAPLE

Acer circinatum

Threshold: 6"

Form

Up to 30 feet; spreading, multi-stemmed shrub

Leaves

Deciduous - Opposite - Simple
Palmate; 7-9 pointed lobes; serrated edges; a little larger than your palm: 4 3/4" in length and width

Bark

Gray-brown; smooth

Flower

Small and white (1/4"); maroon sepals underneath; hanging in clusters

Fruit

Pairs of smooth winged seeds joined at an obtuse angle; to 1 1/4" long

Tree Tip

Called circinatum to indicate the circles formed when tall branches bend to the ground and sprout roots.



LONDON PLANE TREE *Platanus x acerifolia*

Threshold: 4' 10"

Form 70-100 feet; straight clear trunk; pyramidal crown becomes very large, open and wide spreading at maturity

Leaves Deciduous - Alternate - Simple Palmate; 3-5 shallow lobes; leaf edge coarsely toothed; to 10" wide and 8" long; dark green above, pale beneath

Bark Mottled gray, olive green, and cream; flaking off in plates

Flower Tiny; grouped separately in small round clusters; males yellow, females reddish

Fruit Globed shaped multiple fruit; usually 2 per stalk

Tree Tip Can be confused at first with maples, or sweet gum. Also known as Sycamore.



fruit



Fam

AMERICAN SWEETGUM *Liquidambar styraciflua*

Threshold: 2' 1"

Form 60-75 feet; clear, straight trunk; crown pyramidal early in life, rounded later

Leaves Deciduous - Alternate - Simple Star-shaped; 5-7 pointed, deep lobes; edges finely serrated; 4-6" in length and width

Bark Gray-brown; thick; deeply furrowed with rounded ridges

Flower Yellow-green; tiny; in clusters

Fruit Prickly sphere the size of a cherry tomato (1-1 1/2" in diameter); one per stalk; composed of many beaked, seedbearing capsules

Tree Tip Seen along many of Seattle's streets. Do not confuse with London Plane Tree.



Fruit



Fam

BIRCH *Betula species*

Threshold: 6"

Form 40-60 feet (European White Birch) or up to 80 feet (Paper Birch); can have several trunks; crown open and rounded

Leaves Deciduous - Alternate - Simple Pointed with round base; doubly serrate edge; 2-3" long (Paper) or 1-2" (Euro.)

Bark White; easily peeling in papery strips (Paper) or cracking to show dark furrows between white ridges (Euro.)

Flower Tiny flowers in two kinds of catkins: catkin green and shorter; yellow, longer

Fruit Fat green catkins of tiny winged nutlets

Tree Tip The native species in this pair, Paper Birch, was used in baskets and canoes.



Leaf



Fam

PACIFIC DOGWOOD *Cornus Nuttallii*

Threshold: 6"

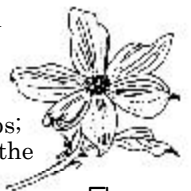
Form 10-40 feet; small trees or shrubs; branches often appearing to grow in horizontal layers

Leaves Deciduous - Opposite - Simple Leaves oval with acutely pointed tips; veins parallel and curving to follow the smooth leaf edge

Bark Smooth except at base

Flower True flowers tiny, greenish yellow, and in clusters surrounded by 4-6 white to pale pink petal-like bracts

Fruit Bright red oval fruits (3/8" long) in dense clusters



Flower

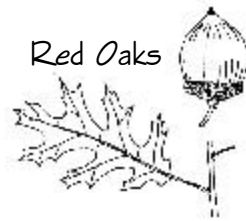


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OAKS *Quercus*

Threshold: 6"

<u>Form</u>	Trees and shrubs of a wide variety. The family is divided into 2 groups: red oaks and white oaks.
<u>Leaves</u>	Deciduous - Alternate - Simple Red oaks: pointed bristle-tipped lobes; White oaks: rounded lobes
<u>Bark</u>	Dark gray-brown; furrowed or scaly
<u>Flower</u>	Tiny, yellow; occurring in short, catkinlike clusters
<u>Fruit</u>	Acorn; inside of shell hairy (Red Oaks) or not hairy (White Oaks)
<u>Tree Tip</u>	Though oaks are deciduous, the leaves stay on the branches through winter and give trees a dead appearance.



Red Oaks



Oregon White Oak

Quercus garryana



White Oaks

Fam



Fam



50'-70'

INCENSE CEDAR *Calocedrus decurrens*

Threshold: 3' 9"

<u>Form</u>	100-150 feet; narrowly pyramidal, sometimes with more than one main axis; short specimens used in hedges
<u>Leaves</u>	Evergreen - Scales Each leaf is a tiny, pointed scale 1/8" in length; scales sheath entire twig
<u>Bark</u>	Red brown; scaly to fibrous
<u>Cone</u>	Unique cone which is oblong when closed, but opens to show 6 scales; 3/4 - 1 1/2" long
<u>Tree Tip</u>	Examine leaves to avoid confusing this one with Western Red Cedar. Cones differ as well. Also known as Libocedrus decurrens.



Scales



Fam

WESTERN RED CEDAR *Thuja plicata*

Threshold: 4' 0"

<u>Form</u>	150-200 feet; broadly pyramidal; trunk buttressed at base; lower branches drooping and J-shaped
<u>Leaves</u>	Evergreen - Scales Foliage in flat sprays "fronds"; leaves are tiny scales 1/4" long; overlapping to make a braided pattern
<u>Bark</u>	Silvery gray outer bark; reddish inner bark; very fibrous
<u>Cone</u>	Egg-shaped and woody; having 10 scales; sitting upright on twig; 1/2" long
<u>Tree Tip</u>	Another very important Northwest native. The bark and wood are fragrant and rot-resistant: the bark can be made into rope; the wood is both a traditional and modern building material.



Scales



Fam

CONIFERS

The conifers are set apart from the broadleaves by having a different kind of seed. Conifers get their name because for most species, their seeds are found in cones. There are a few species whose cones look more like fruits, however. Most conifers keep their needle-like leaves year-round, though there are few which drop them each fall.



DOUGLAS FIR *Pseudotsuga menziesii*

Threshold: 3' 0"

<u>Form</u>	100-250 feet; older branches breaking off to leave lower trunk clear; open, spire-like crown
<u>Leaves</u>	Evergreen - Single Needles 1 1/4" flat needles; pointed tip; having a petiole
<u>Bark</u>	Dark brown-almost purplish; heavily furrowed
<u>Cone</u>	Distinctive pendant cone with 3-pronged bracts (mouse tails and feet as the story goes) extending out underneath each scale; 4" long
<u>Tree Tip</u>	Very common native. You can tell it is not a true fir because of the raised scars left on the twigs, the petioles of the needles, and the pendant cones.

Leaf Petiole



Scales



Fam

WESTERN HEMLOCK *Tsuga heterophylla*

Threshold: 2' 0"

Form

125-175 feet; pyramidal with a conspicuously drooping top; sweeping, feathery, branches to ground when open-grown

Leaves

Evergreen - Single Needles
Needles are different lengths; extending horizontally from twig

Bark

Gray-brown and scaly

Cone

Diminutive cones for such a big tree; 3/4" in length; always pendant

Tree Tip

Hemlocks are an important native species which indicate a healthy, mature forest. The scientific name is fitting: *Tsuga* means hemlock and *heterophylla* means "different leaves".

Branch with Cone

Form

PINE FAMILY *Pinus species*

Form

Conifers of various heights; branches arranged around a straight trunk like a bottle brush - "whorled branching"

Leaves

Evergreen - Bundled Needles
Needles are bundled together in fascicles of 1-5; needle number and length are shown for 4 species commonly found in Seattle

Cone

Cones have hard woody scales and vary in shape and size (noted at right). They are usually hanging down off the branch.

Tree Tip

You will need to use a combination of several of the above features to make a positive identification. You can see that Scotch pine and Lodgepole Pine could easily be confused.

Western White Pine
Pinus monticola

Threshold: 2' 6"

Cone

3-5"

Form

Ponderosa Pine
Pinus ponderosa

5-10"

Cone

Needle

Form

Lodgepole Pine
Pinus contorta

Threshold: 6"

1-3"

Cone

Form

GLOSSARY

Alternate
leaves arranged singly along stem; not opposite

Blade
the broad portion of a leaf

Canopy
the uppermost layer of foliage in a forest of a single tree

Compound leaf
a leaf composed of several leaflets; a leaf whose blade is completely divided into several leaflets

Crown
the upper part of the tree, all of its branches and leaves together; similar to canopy

Deciduous
leaves falling off once a year

Drip line
the area around the base of a tree within the outside edge of the crown; also called drip zone

Evergreen
leaves staying on year after year

Form
height and general shape of the tree

Fruit
the seed-bearing structure of the tree

Leaf
identified by having a tiny bud hidden between the leaf petiole and the twig

Leaflet
one of the small leaf-like structures in a compound leaf; distinguished from a leaf because there is no bud hidden between the leaflet petiole and the axis it is attached to

Lobe
a shallow division in a simple leaf

Opposite
leaves arranged in pairs along a stem so that 2 leaves are opposite each other

Petiole
the stalk of the leaf which attaches it to the twig

Shrub
a many-stemmed woody plant, usually less than 30 feet tall

Simple Leaf
a leaf whose blade is whole and not completely divided into leaflets

Tree
generally a single-stemmed woody plant growing at least 20 feet tall at maturity

